

U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2005-078 -EA

CASEFILE/PROJECT NUMBER (optional): COD-035710

PROJECT NAME: APD for well # Piceance Creek Unit (PCU) T25X-25G

LEGAL DESCRIPTION: T. 1 S., R. 97 W., NWSW sec.25, 6th P.M.

APPLICANT: ExxonMobil Oil Corporation

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: The applicant proposes to perform the following actions: Construct a new access road right of way (ROW) approx. 0.4 mi. x 40' (1.9 ac.), upgrade existing two track from 10' width to 40' ROW width with 18' running surface for approx. 1.5 mi. (5.45 ac.), and construct a well pad for potentially 9 wells with a dimensions of 350'x 450', and adjacent production facility pad 80' x 200' (total pad 4.4 ac.). Drill well PCU T25X-25G, and install one buried steel pipeline parallel to access roads for 16,800 with 50' ROW (addl. 10' ROW=3.9 ac.). Total new surface disturbance on BLM would be approx. 15.65 acres.

Road would be crowned, ditched, properly drained and surfaced in accordance with BLM standards prior to drilling operations. Corrugated metal pipe would be placed as needed. No cattleguards would be required. Gravel, if needed, will be bought from an existing commercial site. Waterbreaks would be constructed as per BLM surface operating standards.

Water would either be piped with surface lines or trucked over access road.

Drill cuttings would be disposed of in the reserve pit. Any drilling mud with greater than 1% diesel net weight would be hauled to a proper disposal site. An alternative to hauling would be solidification in the pit with method approved by the Colorado Oil and Gas Conservation Commission (COGCC). Trash, waste paper, and other garbage would be contained in a fenced trash cage and hauled to a commercial disposal site. Sewage from trailers on location and human wastes would be in self-contained chemical toilets or holding tanks and would be disposed of properly.

The reserve pit would be fenced on three sides with 4 strand barbed wire during drilling and on the fourth side after the rig is released.

No ancillary facilities would be constructed.

Upon completion of the operation and disposal of trash and debris as prescribed above, pits would be backfilled and recontoured as soon as practical after they have dried.

Unneeded disturbed surfaces remaining after completion to the surface production facilities would be shaped to match the surrounding terrain and seeded as specified by the BLM.

When the well is abandoned, ExxonMobil would rehabilitate the road and location as per BLM specifications.

Revegetation of the drill pad would comply with BLM specifications.

Rehabilitation operations would start in a timely manner following the completion of operations, typically the following construction season.

Approximate date proposed action work would start is 06/01/05.

No Action Alternative: No permit would be approved, no well, access road, or pipeline would be constructed, and lessee would be denied lease rights. There would be no additional environmental consequences.

NEED FOR THE ACTION: To respond to request by applicant to exercise lease rights and develop hydrocarbon reserves.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Pages 2-5 thru 2-6

Decision Language: Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values.

**AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES /
MITIGATION MEASURES:**

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The proposed action is within a Class II Prevention of Significant Deterioration (PSD) air quality area. No Class I PSD areas are within 40 miles of the project area.

The principal air quality parameter likely to be affected by the project is the inhalable particulate level (PM₁₀ - particles ten microns or less in diameter). Although no monitoring data are available for the survey area, it can be surmised that the air quality is good because the Colorado Air Pollution Control Division (APCD) estimates the maximum PM₁₀ levels (24-hour average) in rural portions of western Colorado like the Piceance Basin to be less than 50 micrograms per cubic meter. This estimate is well below the National Ambient Air Quality Standard for PM₁₀ of 150 µg/m³.

Environmental Consequences of the Proposed Action: The proposed action would result in short term, local impacts on air quality during and after construction, due to dust being blown into the air. However, airborne particulate matter should not exceed Colorado air quality standards on an hourly or daily basis. Following successful revegetation of the sites, airborne particulate matter should return to near pre-construction levels

Environmental Consequences of the No Action Alternative: None

Mitigation: See mitigation in Rangeland Management section below.

CULTURAL RESOURCES

Affected Environment: The proposed well pad location, access road and well tie pipeline have been inventoried at the Class III (100% pedestrian) level (O'Brien 2005, Compliance Dated 4/28/2005, Jennings 2004, Compliance Dated 12/06/2004) with no new cultural resources identified in the proposed construction area.

Environmental Consequences of the Proposed Action: The proposed well pad, access road and well tie pipeline will not impact any known cultural resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The noxious weeds black henbane, houndstongue, yellow toadflax, mullien and bull thistle occur immediately north of the project in areas of un-revegetated soil disturbance associated with roads, wells and pipelines as a result of intensive oil and gas development in the area. The invasive alien cheatgrass also occurs on these same sites.

Environmental Consequences of the Proposed Action: The proposed action will create areas of soil disturbance which, if they are not promptly and effectively revegetated, will provide safe sites for the establishment of noxious weeds and cheatgrass.

Environmental Consequences of the No Action Alternative: there will be no change from the present situation.

Mitigation: The operator will monitor the right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The operator will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

MIGRATORY BIRDS

Affected Environment: There are a number of migratory birds that fulfill nesting functions in the mixed shrub and pinyon-juniper types traversed by this project during the months of May, June, and July, including several species identified as having higher conservation interest by the Rocky Mountain Bird Observatory, Partners in Flight program (i.e., Virginia's warbler, Brewer's sparrow, gray flycatcher, black-throated gray warbler). Because the project area is almost exclusively composed of former sagebrush communities heavily encroached with pinyon-juniper regeneration and open-canopied submature forms; neither sagebrush nor pinyon-juniper associates are well represented. Woodland species associated with cavities are generally absent.

Although this high plateau area has no open water or wetland areas that support or attract waterfowl use, the development of reserve pits that contain drilling fluids have attracted waterfowl use, at least during the migratory period (i.e., local records: mid-March through late May; mid-October through late November).

Environmental Consequences of the Proposed Action: Construction and drilling associated with this well is scheduled to commence in early June 2005 which is synchronous with the beginning of the migratory bird nesting season. The access route associated with this well is a seldom used 2-track and likely has no significant influence on breeding bird distribution. Upgrading and pad construction would directly affect about 12 acres of habitat and birds using areas adjacent to the road and pad would be subject to varying levels of nest disruption on an additional 36 acres. Based on BLM's experience with breeding bird densities found in similar habitats, 1 or 2 pair of birds may be directly affected by construction and it would be unlikely that more than 10 pair of higher interest migratory birds would be adversely influenced by this action.

It has recently been brought to BLM's attention that in certain situations migratory waterfowl (i.e., teal and gadwall) have contacted drilling or frac fluids (i.e., stored in reserve pits) during or after completion operations and are suffering mortality in violation of the Migratory Bird Treaty Act. The extent and nature of the problem is not well defined, but is being actively investigated by the federal agencies and the companies. Until the vectors of mortality are better understood, management measures must be conservative and relegated to preventing bird contact with frac and drilling fluids that may pose a problem.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to disrupt the breeding activities of migratory birds.

Alternate actions would have similar or more substantive consequences as those discussed under the proposed action.

Mitigation: Once drilling is complete, access to reserve pit contents by migratory birds must be effectively precluded if drilling or frac fluids possess toxic properties or present potential for compromising the water repellent properties of birds' plumage.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no animals listed, proposed, or candidate to the Endangered Species Act, nor animals considered sensitive by the BLM, that are known to inhabit or derive important benefit from the areas potentially influenced by the proposed action.

Environmental Consequences of the Proposed Action: Pad and road construction and drilling/completion operations would have no conceivable influence on special status species or associated habitat.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to influence special status species or associated habitats.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species: The proposed and no-action alternatives would have no influence on populations or habitats of animals associated with the Endangered Species Act or BLM sensitive species and, as such, would have no influence on the status of applicable land health standards.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (includes a finding on Standard 4)

Affected Environment: The surface geology of the well location is the Thirteen Mile Tongue of the Green River Formation. Most of the threatened, endangered and sensitive (TES) plant species that occur in the WRFO resource area are rare endemics of the Thirteen Mile Tongue formation.

Environmental Consequences of the Proposed Action: A field survey was conducted in late April and it was determined that outcroppings of the formation did not exist in the proposed project area. No TES plant species were observed or are they likely to occur in the proposed project area. The project area is almost exclusively composed of former sagebrush communities heavily encroached with pinyon-juniper regeneration.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

Finding on the Public Land Health Standard for Threatened & Endangered species:

There is no reasonable likelihood that the proposed action or no action alternative would have an influence on the condition or function of Threatened, Endangered, or Sensitive plant species. Thus there would be no effect on achieving the land health standard.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The proposed action is in Cole, Bear and Lee Gulches, all of which are tributaries to Piceance Creek, and are listed in segment 16 of the Stream classifications and Water Quality Standards. A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. All actions are within the White River watershed.

The State has classified this segment as a "Use Protected" reach. Its designated beneficial uses are: Warm Aquatic Life 2, Recreation 2, and Agriculture. The antidegradation review requirements in the Antidegradation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For this reach, minimum standards for three parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 2000/100 ml, and 630/100 ml E. coli. This segment retained its Recreation Class 2 designation after sufficient evidence was received that a Recreation Class 1a use was unattainable.

Limited data is available for ephemeral drainages in the immediate area of the proposed action. It is assumed their behavior is typical of other ephemeral drainages in the resource area in that they flow in direct response to runoff events (snowmelt and intense summer late fall thunderstorms). Other than the possibility of having elevated sediment concentrations, water quality of runoff is usually of good quality and well within the parameters set by the state.

Environmental Consequences of the Proposed Action: Impacts to water quality from development of this well, roads and pipelines would be similar to other surface disturbing activities. Some of the impacts would be exposure of soil surface to wind and water erosion, reduced water quality due to erosion of sediment and salt, off roads, drill pads, and pipeline rights of ways, and piping or rill erosion where well pads and roads are exposed to climatic elements. These impacts would be short term until re-vegetation has occurred. If the well turns out to be a dry hole, reclamation especially on the road should be started immediately by re-contouring and seeding the right of way.

Environmental Consequences of the No Action Alternative: Impacts are not anticipated from not permitting the proposed action.

Mitigation: No additional mitigation aside from implementing interim and abandonment recommendations described in the APD's 13-Point Surface Use Plan would be necessary.

Finding on the Public Land Health Standard for water quality: The water quality of the drainages discussed above is well within the criteria set by the state, thus meeting the land health standard. The proposed action will not change this status.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: The closest channel system supporting riparian vegetation is Piceance Creek, which is separated by about 3 miles of ephemeral channel from the proposed action (Cole and/or Lee Gulch). This portion of Piceance Creek (and about 6 miles downstream) is private and stream function and morphology is heavily modified by irrigation practices (e.g., not strongly represented by obligate forms of riparian vegetation, moderately entrenched/undersized floodplains).

Environmental Consequences of the Proposed Action: This pad is situated on the edge of a relatively broad, gentle-gradient ridge separated from the nearest riparian system by at least 3 miles of ephemeral channel. Pad and road construction would have no direct impact on riparian/wetland resources. With the application of BMPs associated with soil erosion there is no reasonable likelihood that fugitive sediments would have any influence on the function or condition of the Piceance Creek channel or its associated riparian resources.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have any direct or indirect influence on downstream riparian communities.

Mitigation: None.

Finding on the Public Land Health Standard for riparian systems: Downstream portions of Piceance Creek are private with the nearest BLM-administered reach about 6 miles downstream. These private portions of the creek are stable, but due to the factors listed above, their functional status is generally at-risk. Neither the proposed or no-action alternative would have any effective influence on the function or condition of the Piceance Creek channel, its riparian expression, or its land health status.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACEC's, flood plains, prime and unique farmlands, Wilderness, or Wild and Scenic Rivers, exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The soil types in the project area occur from 6,000 to 8,900 feet in elevation. The average annual precipitation in the project area is 14 to 22 inches, the average annual temperature is 37 to 45 degrees F, and the average frost-free period is approximately 80 to 105 days. The proposed pad and associated road improvement, road construction, and pipeline construction occur within four soil units inventoried by the Natural Resources Conservation Service (NRCS). Soil units, names, and characteristics are listed in the following table:

Proposed Action	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
Well Pad	Piceance fine sandy loam	5-15%	Rolling Loam	<2	Medium	Moderate to high	20-40
Access road	Rentsac channery loam	5-50%	Pinyon-Juniper woodlands	<2	Rapid	Moderate to very high	10-20
Access road	Rentsac-Piceance complex	2-30%	PJ woodland /Rolling Loam	<2	Medium	Moderate to high	10-20
Access road	Yamac Loam	2-15%	Rolling Loam	<2	Medium	Slight to moderate	>60

Environmental Consequences of the Proposed Action: All soil units have listed salinity values of less than 2 Mmhos per centimeter. None of the unit mapping indicates a fragile soil with slopes greater than 35 percent, the criteria that would trigger implementation of a Controlled Surface Use stipulation.

Road, well pad and pipeline construction would remove surface cover and disturb soils, thus impacts associated with oil and gas and road development include but are not limited to, loss of topsoil, soil compaction and possible increase in sediment loads to the White River. The primary surface-disturbing impact would be a potential increase in sediment transport from runoff events after the protective vegetative cover has been removed. Best management practices (BMPs) used to slow runoff, trap sediment and prepare reclaimed areas for seeding would help reduce soil loss. With the use of these BMPs, impacts are expected to be short in duration, during the construction phase and for a short time after construction until successful reclamation are achieved.

Environmental Consequences of the No Action Alternative: Under the No Action Alternative, the existing dirt road would not be improved. The marginal improvement in erosion and sedimentation control brought about by the upgrade would not occur.

Mitigation: When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff.

Finding on the Public Land Health Standard for upland soils: Soils within the area of the proposed action meet the criteria established in the standard for upland soils. With successful reclamation, the proposed action would not change this status.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Vegetation in the project area is dominated by Pinyon-juniper woodlands interspersed with Wyoming big sagebrush parks. The understory of the woodlands varies from very sparse decadent Utah serviceberry and mountain mahogany in the older woodlands to one with a moderately dense cover of native grasses and forbs. The predominate ecological site associated with big sagebrush parks is Rolling Loam.

Environmental Consequences of the Proposed Action: The proposed action will result in complete destruction of the existing vegetation on 16 acres. In terms of plant community composition, structure and function, the principal negative impact over the long term would occur if invasive species or noxious weeds are allowed to establish and proliferate on the disturbed areas resulting from the proposed action.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: Promptly recontour and revegetate all disturbed areas with Native Seed mix # 3 listed in the table below.

Native seed Mix #3			
3	Western wheatgrass (Rosanna)	2	Gravelly 10"-14", Pinyon/Juniper Woodland, Stony Foothills, 147 (Mountain Mahogany)
	Bluebunch wheatgrass (Whitmar)	2	
	Thickspike wheatgrass (Critana)	2	

Native seed Mix #3			
	Indian ricegrass (Rimrock)	1	
	Fourwing saltbush (Wytana)	1	
	Utah sweetvetch	1	

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Plant communities in the project area currently meet the Standard and are expected to continue to meet the Standard following implementation of the proposed action.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: Piceance Creek, separated by about 3 miles of ephemeral channel from the proposed action, is the nearest aquatic habitat. The nearest BLM-administered reach is about 6 miles downstream of this point. Stream function and morphology on these downstream reaches are heavily modified by summer-long upstream irrigation practices, but the stream persists in supporting small populations of leopard frog, speckled dace, and flannel-mouthed sucker.

Environmental Consequences of the Proposed Action: This pad is situated on the edge of a relatively broad, gentle-gradient ridge separated from the nearest aquatic system by 3 miles of ephemeral channel. Pad and road construction would have no direct impact on aquatic habitats. With the application of BMPs associated with soil erosion there is no reasonable likelihood that fugitive sediments would have any influence on the function or condition of the Piceance Creek channel or its associated aquatic values.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have any direct or indirect influence on downstream aquatic habitat.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): Downstream portions of Piceance Creek are private with the nearest BLM-administered reach about 6 miles downstream. Neither the proposed or no-action alternative would any effective influence on the function or condition of the Piceance Creek channel, its aquatic habitat values, or its land health status.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: This area is encompassed by deer severe winter range that is normally occupied during the late winter and early spring months. However, snow accumulations on these relatively level and higher elevation ridgeline positions typically limit deer use after January, with subsequent spring use typically involving April through mid-May. Advanced vegetation succession (pinyon-juniper encroachment) across the area's ridgelines has

likely suppressed the production and availability of favored seasonal deer forages, particularly deciduous browse and herbaceous species.

Non-game wildlife using this area are typical and widely distributed in extensive like habitats across the Resource Area and northwest Colorado; there are no narrowly endemic or highly specialized species known to inhabit those lands potentially influenced by this action.

Environmental Consequences of the Proposed Action: The proposed action represents a substantial expansion of natural gas development activity to the northwest of Magnolia. Although the access uses an existing 2-track route and would, therefore, not increase effective road density in this area, the change in road character and increasing frequency of use would expand the extent of avoidance-related effects (i.e., behavioral avoidance and habitat disuse; increased energetic demands) to an additional 100 acres or so. Although utility of the affected area would be most affected during heavy recreation use in September and October, the proposed action represents an incremental decline in severe winter range capacity during the mid-winter and early spring periods. Although well development would likely be concluded by the winter use period, this action is subject to a Condition of Approval that allows activity deferral for up to 60 days during the January through April severe winter period (i.e., a semblance of big game severe winter range stipulation TL-08). This COA would be applied in an effort to reduce the effects of human disturbance on big game, including avoidance (habitat disuse) and extraneous energy demands (heightened alert, locomotion).

The long-term occupation of about 12 acres of foraging area (pad and road) and later temporary reduction in woody overstory on about 16 acres for the pipeline would have negligible influence on big game forage availability, with the herbaceous component ultimately offset by reclamation.

Similar to the big game discussion above, road upgrading and pad construction would incrementally reduce the current utility of the site for nongame bird nesting activity. However, woodland habitats comprised primarily of regeneration and submature forms do not support a strong contingent of obligate woodland species due to suboptimal nest substrate (e.g., relatively simple canopy structure, lack of cavities). The loss of 12 acres of submature woodland habitat (the site likely an historic big sagebrush disclimax) is considered negligible.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to affect resident wildlife populations or associated habitat.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): On a landscape scale, the project area meets the public land health standards for terrestrial animal communities. The proposed action is considered an incremental addition to those lands dedicated to mineral development, but would not detract measurably from continued meeting of the land health standard at the landscape scale.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management			X
Forest Management		X	
Geology and Minerals			X
Hydrology/Water Rights	X		
Law Enforcement		X	
Noise		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations	X		
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: The proposed project site in with an open seasonally travel management area and BLM Road 1266 will be the single access.

Environmental Consequences of the Proposed Action: BLM road 1266 will likely see an increase in traffic during construction phase of project and traffic will increase above current levels after project completion due to likely ongoing well maintenance.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

FIRE MANAGEMENT

Affected Environment: The proposed well involves approximately 1.9 miles of road construction and/or road improvement, 3.9 acres of pipeline, and about 4.4 acres of drill pad clearing for an approximate total of 15.7 acres of disturbance. Due to the existing tree cover of sub-mature pinion and juniper, there will be a need for the operator to clear some of these trees. If not adequately treated, these trees will result in elevated hazardous fuels conditions and remain on-site for many years. These accumulations of dead material are very receptive to fire brands and spotting from wind driven fires and can greatly accelerate the rate of spread of the fire front.

The road(s) associated with this project may be used by the general public for a variety of uses, including access for fire wood gathering, hunting and other dispersed recreational activities. Increased public use of an area will nearly always result in an increased potential for man-caused wildland fires.

The National Fire Plan calls for “firefighter and public safety” to be the highest priority for all fire management activities. In the pinion, juniper, and brush types common on the White River Resource Area, roads and other man-made openings are commonly used as fuel breaks or barriers to control the spread of both wildland and prescribed fires. By reducing the activity fuels created from this proposal, future fire management efforts in this area should be safer for those involved and more effective.

Environmental Consequences of the Proposed Action: There will be approximately 15.7 acres of road, well pad, and pipeline construction requiring the removal of pinion/juniper fuel type within the proposed action location. If not treated the slash and woody debris will create an elevated hazardous dead fuel loading which could pose significant control problems in the event of a wildfire. Additionally there would be greater threat to public, ExxonMobil, and fire suppression personnel, and under the right climactic conditions could threaten the compressor and housing “man camp” facilities at Magnolia Camp.

Environmental Consequences of the No Action Alternative: There would be no tree removal or disturbance which would cause significant dead fuel loading.

Mitigation: Several options may be considered for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This effectively breakdown the woody fuel and scatters the debris thereby eliminating any hazardous fuel load adjacent to the new road and well pad.

The other option would be to cut trees and have them removed for firewood, posts, or other products. The branches and tops should be lopped and scattered to a depth of 24 inches or less. If the products are left for collection by the general public, they should be piled along the road side or pad to facilitate removal.

Should there be a requirement for tree debris to be brought back onto the pipeline ROW for reclamation that debris should be scattered not jackpotted and not exceed 2-5 tons/acre.

For the entire pipeline ROW, and in particular where the ROW goes through the fuel reduction treatments in T1S R96W Sec 31 and T2S R96W Sec 6, the disturbed areas must be promptly re-seeded with native seed mix #3. All weeds occurring on the ROW must be treated as identified in the noxious weed section.

GEOLOGY AND MINERALS

Affected Environment: The surface geology of the well location is the Thirteen Mile Tongue of the Green River Formation and ExxonMobil's targeted zone is in the Mesaverde. During drilling potential water, oil shale, sodium, and gas zones will be encountered from surface to the targeted zone. Aquifers that will be encountered during drilling are the Perched in the Uinta, the A-groove, B-groove and the Dissolution Surface in the Green River formation. These aquifer areas are known for difficulties in drilling and cementing, along with some zones in the Wasatch formation. Oil shale and sodium resources are also found in the Green River formation. It is in the Piceance Creek Unit on federal oil and gas lease COD-0035710.

Environmental Consequences of the Proposed Action: Drilling and completion of this well may adversely affect the aquifers if there is loss of circulation or problems cementing the casing. However, the approved cementing and completion procedure of the proposed action isolates the formations and will prevent the migration of gas, water, and oil between formations. Development of these wells will deplete the hydrocarbon resources in the targeted formation.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

PALEONTOLOGY

Affected Environment: The proposed well location is the Thirteen Mile Tongue of the Green River Formation, which the BLM has not classified as to fossil bearing potential. However many of the Green River Formation components are fossiliferous therefore the possibility that the Thirteen Mile tongue may contain fossils cannot be ruled out. The access road and well tie pipeline also cross the Thirteen Mile tongue and the Uinta Formation. The BLM has classified the Uinta Formation as a Condition I fossil bearing formation meaning it is known to produce scientifically important fossil resources.

Environmental Consequences of the Proposed Action: If it becomes necessary to excavate into the underlying Thirteen Mile Tongue of the Green River Formation to level the well pad or excavate the reserve/blooiie pit there is an undetermined and unknown potential for impacting fossil resources. If it becomes necessary to excavate into the underlying rock formation to construct the access road or bury the well tie pipeline, particularly in the Uinta Formation there is a potential to impact scientifically important fossil resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation: The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or paleontological sites, or for collecting fossils.

If paleontological materials (fossils) are uncovered during project activities, the operator will immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

RANGELAND MANAGEMENT

Affected Environment: The proposed action is within the Little Hills allotment (06006). The allotment is used from spring through fall by Burke Brothers as part of their yearly livestock operation on the public lands.

Environmental Consequences of the Proposed Action: Soil and vegetation disturbance associated with the proposed action will result in the short and long term loss of three (3) AUMs of livestock forage.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: If construction/development occurs between April 15 and November 15, the operator will be required to water or surface the access roads to reduce airborne dust and damage to roadside vegetation communities.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The project areas area has been delineated/most resembles a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM physical and social recreation setting is typically characterized by a natural appearing environment with few administrative controls, low interaction between users but evidence of other users may be present. SPM recreation experience

is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

Environmental Consequences of the Proposed Action: The public will lose approximately 16 acres of dispersed recreation potential while wells are in operation. The public will most likely not recreate in the vicinity of these facilities and will be dispersed elsewhere. If action coincides with hunting seasons (September through November) it will most likely disrupt the experience sought by those recreationists.

With the introduction of new well pads and roads, an increase of traffic could be expected increasing the likelihood of human interactions, the sights and sounds associated with the human environment and a less naturally appearing environment.

Environmental Consequences of the No Action Alternative: No loss of dispersed recreation potential and no impact to hunting recreationists.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: The proposed action is located within a VRM class III area. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed action would be located on the upper level, flatter portion of a ridge with the proposed access road being the only route that a casual observer would be able to view the action when traveling through the area. The surrounding vegetation is pinyon/juniper with sufficient height to conceal production facilities. By painting all production facilities Juniper Green to mimic the surrounding vegetation, the level of change to the characteristic landscape would be low, and the standards of the VRM III classification would be retained.

Environmental Consequences of the No Action Alternative: There would be no additional impacts.

Mitigation: Paint all production facilities Juniper Green.

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts from oil and gas development were analyzed in the White River Resource Area Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) completed in June 1996. Current development, including the proposed action, has not exceeded the foreseeable development analyzed in the PRMP/FEIS.

REFERENCES CITED:

Jennings, Sarah

- 2004 A Class III Cultural Resource Inventory for the Proposed Exxon-Mobil Corporation T25X-25G Well Pad, Access Road and Pipeline and the T18X-9g Well Pad in Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

O'Brien, Patrick K.

- 2005 A Class III Cultural Resource Inventory for a Proposed Pipeline Corridor Segment Associated with Exxon-Mobil Corporation's T25X-25G Well pad Development in Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Caroline Hollowed	Planning and Environmental Coordinator	Air Quality
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern
Tamara Meagley	Natural Resource Specialist	Threatened and Endangered Plant Species
Michael Selle	Archaeologist	Cultural Resources Paleontological Resources
Mark Hafkenschiel	Rangeland Management Specialist	Invasive, Non-Native Species, Vegetation, Rangeland Management
Ed Hollowed	Wildlife Biologist	Migratory Birds
Ed Hollowed	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Bo Brown	Hazmat Collateral	Wastes, Hazardous or Solid
Caroline Hollowed	Planning and Environmental Coordinator	Water Quality, Surface and Ground Hydrology and Water Rights
Ed Hollowed	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	Outdoor Recreation Planner	Wilderness
Caroline Hollowed	Planning and Environmental Coordinator	Soils
Ed Hollowed	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	Outdoor Recreation Planner	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management

Name	Title	Area of Responsibility
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Penny Brown	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Recreation
Keith Whitaker	Natural Resource Specialist	Visual Resources
Valerie Dobrich	Natural Resource Specialist	Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2005-078-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve the APD for well # Piceance Creek Unit (PCU) T25X-25G, as proposed, for the well pad, access road and pipeline route with the mitigation listed below. The proposed action is in conformance with all applicable decisions in the White River RMP, and would not be expected to result in unnecessary or undue degradation of the public lands or resources.

MITIGATION MEASURES: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator will immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items,

sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

3. The operator will monitor the right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The operator will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

4. Once drilling is complete, access to reserve pit contents by migratory birds must be effectively precluded if drilling or frac fluids possess toxic properties or present potential for compromising the water repellent properties of birds' plumage.

5. The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

6. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff.

7. Promptly recontour and revegetate all disturbed areas with Native Seed mix # 3 listed below in the table.

Native seed Mix #3			
3	Western wheatgrass (Rosanna)	2	Gravelly 10"-14",
	Bluebunch wheatgrass (Whitmar)	2	Pinyon/Juniper
	Thickspike wheatgrass (Critana)	2	Woodland, Stony
	Indian ricegrass (Rimrock)	1	Foothills, 147
	Fourwing saltbush (Wytana)	1	(Mountain
	Utah sweetvetch	1	Mahogany)

8. Several options may be considered for treatment of slash from this project.

- a. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This effectively breakdown the woody fuel and scatters the debris thereby eliminating any hazardous fuel load adjacent to the new road and well pad.
- b. The other option would be to cut trees and have them removed for firewood, posts, or other products. The branches and tops should be lopped and scattered to a depth of 24 inches or less.

9. If the products are left for collection by the general public, they should be piled along the roadside or pad to facilitate removal.

10. Should there be a requirement for tree debris to be brought back onto the pipeline ROW for reclamation that debris should be scattered not jackpotted and not exceed 2-5 tons/acre.

11. For the entire pipeline ROW, and in particular where the ROW goes through the fuel reduction treatments in T1S R96W Sec 31 and T2S R96W Sec 6, the disturbed areas must be promptly re-seeded with native seed mix #3. All weeds occurring on the ROW must be treated as identified in the noxious weed section.

12. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or paleontological sites, or for collecting fossils.

13. If paleontological materials (fossils) are uncovered during project activities, the operator will immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

14. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

15. If construction/development occurs between April 15 and November 15, the operator will be required to water or surface the access roads to reduce airborne dust and damage to roadside vegetation communities.

16. Paint all production facilities Juniper Green.

NAME OF PREPARER: Keith Whitaker

NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL:


Field Manager

DATE SIGNED:

4/28/05

ATTACHMENTS: Location map of the proposed action.

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